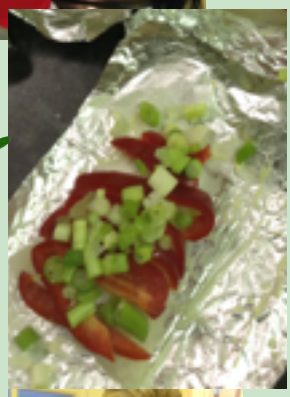
A Healthy Eating Project for Type II diabetes








Time to talk Time to cook

Kathlocke Centre

LOTTERY FUNDED

foodwiser

Introduction

The project came about through the Sugar Group, based at the Kath Locke Centre in Moss Side, Manchester. This support group for people with Type II diabetes has been running since 1999 and provides weekly activities, such as talks from health professionals and a keep fit class.

The group expressed interest in learning more about healthy eating for diabetes. and began working with a nutritional advisor (Loren Grant, Foodwiser). Loren Grant thought it would be useful to revisit traditional Caribbean recipes in the light of new and emerging knowledge about nutrition for diabetes.

The traditional Caribbean diet is rich in vegetables, fruit, fish and coconut - a healthy starting point for any cooking project.

The project's secondary aim was to support community cohesion by improving relationships between the older and younger generation through shared activities that promote wellbeing.

Takeaways and unhealthy fast foods have become a large part of many people's way of eating, and young people are particularly affected. This project provided a good opportunity to share knowledge and skills and get younger people interesting in cooking good food from scratch and learning recipes relevant to their heritage.

The Time To Talk, Time to Cook project was planned in two parts.

Phase 1

- provide education sessions on healthy eating for T2 diabetes
- provide cook and taste sessions to members of the Sugar Group, demonstrating healthy versions of traditional African-Caribbean menus that are also culturally acceptable and means people are more likely to stick with healthy eating.

Phase 2

- develop an inter-generational project so that Sugar Group members share their learning and skills with young people in their community.
- develop and publish a community cookbook and recipes for use by the wider community in Moss Side and Hulme.

This report describes the project and its outcomes. A Quality of Life survey was carried out alongside this project by researchers from Manchester University.

Their evaluation is included as part of this report.

The Kath Locke Centre in Moss Side, Manchester combines NHS and complementary health services, to improve the health and well being of the local community.

Project delivery

Project planning

Project funding from Awards for All/The big Lottery was approved at the end of July 2013.

Work began right away as the aim was to start in September. This would allow six weeks of cook and taste sessions before the Intergenerational session with young people during October half-term.

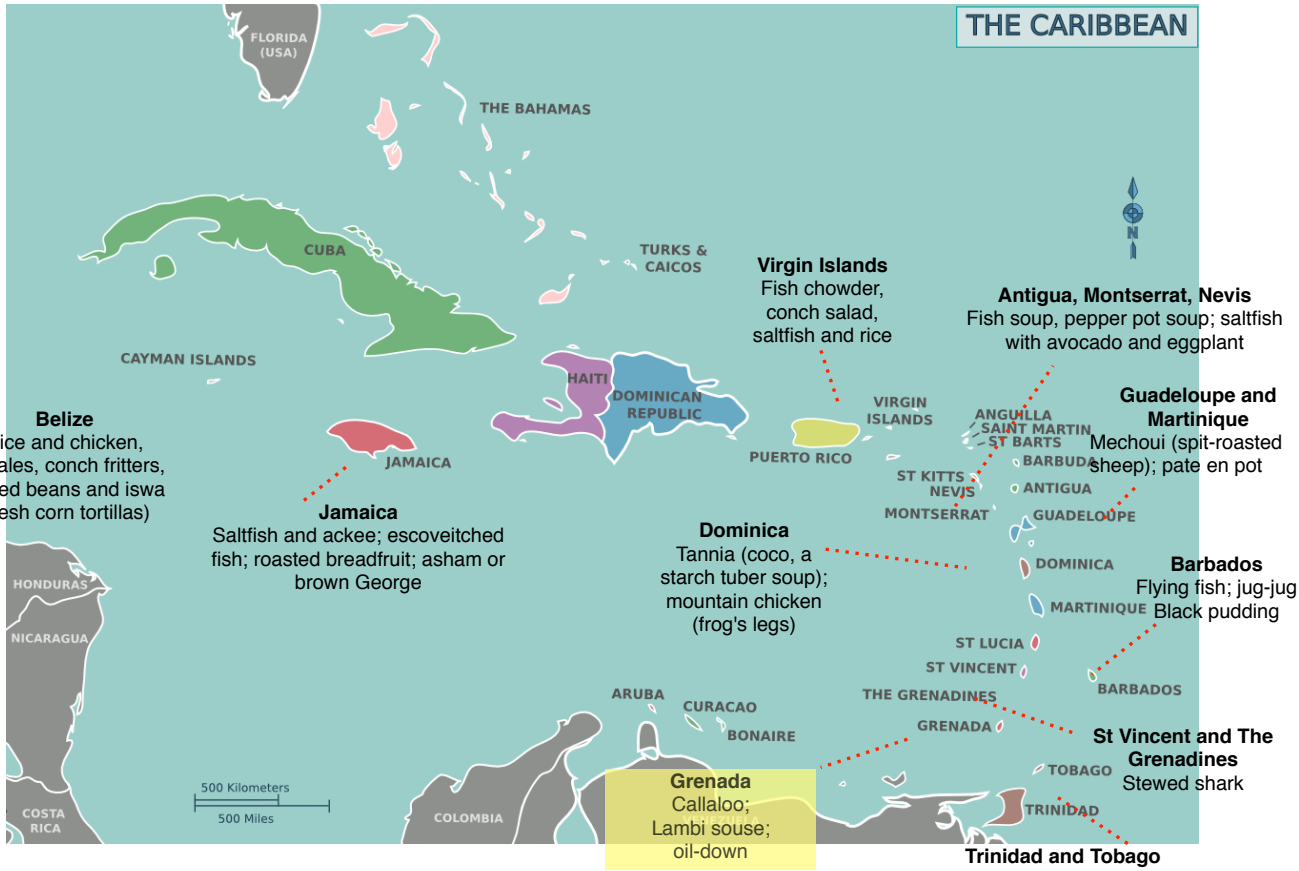
As a first step, during early August, we carried out some consultation sessions with Sugar Group members to establish what their top traditional dishes were. These would form the basis for the cooking and nutritional educational sessions.

This enabled us to draw up a list of the top 10 most well known or favourite Caribbean dishes (we created the map below as a prompt). The Sugar Group was asked to vote for six main courses and vegetable dishes they would like to work on.

This was the final list.

- Jerk chicken/pork
- Rice and Peas
- Ackee and Saltfish
- Fresh fish
- Oxtail
- Curry Goat
- Salad, Kale/Cabbage, Green banana, Sweet potato, Broccoli, Calalloo

Research was carried out to identify all the elements of the dishes which would be helpful for diabetes; healthy 'swaps' were identified for food items that would either cause rapid rises in blood sugar or promote systemic inflammation.[1] Recipes, session plans and shopping lists were drawn up and equipment purchased.



Project planning

During the consultation with the Sugar Group,we agreed the best day of the week for most people to attend the cooking sessions.

The Powerhouse Library in Moss Side was identified as a suitable venue for the cook and taste sessions for several reasons. It is within easy reach of the Kath Locke Centre, it has a large kitchen used by community groups and various youth services are based there which would be helpful for the Intergenerational sessions.

Just before the project was due to start, however, owing to circumstances beyond our control, the day of the week booked to use the Powerhouse was no longer available; consequently, the cooking sessions had to be rescheduled. This meant that people who would have liked to come were no longer able to attend.

Through publicity at local community events, other local people were made aware of the project and invited to attend. This helped to boost the numbers of what was by now a smaller group than originally envisaged.

An element of the project funding was allocated for monitoring and evaluation. Discussions were held with a Health Behaviour Research Psychologist at Manchester University to devise a means of monitoring progress and outcomes relevant to the health and well being of those taking part in the project.

Full details of this aspect of the project are set out in the Research Report section of this document, written by Jo Hart and Nick Dean.

Cook and Taste sessions

The sessions began on October 2 - a slight delay in the start owing to annual leave and issues to do with access to the Powerhouse. The sessions continued weekly until November 6. The Intergenerational session took place on October 30 during half term.

The format of the three-hour sessions were as follows:

- Welcome, introduction, discussion of day's recipes
- First session of cooking
- Tea break and educational session where nutritional aspects were highlighted
- Second session of cooking
- Session ended with communal lunch, eating what we had cooked.

PEPPERPOT STEW MADE WITH SALT BEEF.

BAKED WHITE FISH OPTION FOR NON-MEAT EATERS

Intergen sessions

INTERGEN COOK AND TASTE SESSION BETWEEN THE SUGAR GROUP AND TRINITY HOUSE RESOURCE CENTRE YOUNG WOMEN'S GROUP.

A group of young women from Trinity House Resource Centre in Rusholme took part in the Intergen session on October 30 during the half term break.

The dishes cooked included jerk chicken and sugar free chocolate brownies. Feedback from this session indicated that the young people enjoyed the experience and would be interested in further such activities, so a follow-up session was arranged for February 2014 half term.

This took place at Trinity House Resource Centre in the community kitchen.

The dishes cooked included curry goat, quinoa 'rice' and chocolate avocado mousse.

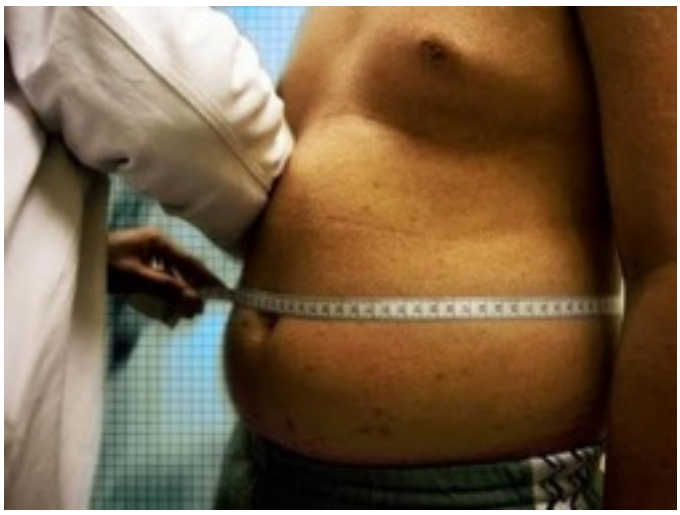
Time to Cook, Time to Talk: a pilot study

Research report

Jo Hart and Nick Dean

March 2014

Contents



1. Background

The number of people diagnosed with diabetes in the UK is now 2.5 million, mainly Type 2 (T2). Risk factors include being overweight, having a large waist, being aged over 40, having a family history of the condition, or having an African, African-Caribbean or south Asian heritage. Rates began to climb in the UK in the mid-1980s and show no sign of slowing down.

As rates of obesity continue to rise, the World Health Organisation predicts that T2 diabetes rates will also continue to climb, with deaths from diabetes projected to double between 2005 and 2030 globally. In Britain, the prevalence of T2 diabetes is much greater in people of South Asian and African Caribbean heritage, and onset tends to be a decade earlier. At current rates, projected spend on diabetes from the NHS budget on will rise from £9.8 billion to £16.9 billion over the next 25 years, 17% of its entire budget.

Conventional healthy eating advice (low fat and high carbohydrate) and lifestyle interventions have to date largely failed to prevent onset or manage the condition or its co-morbidities, resulting in growing demand on the NHS, poorer quality of life for patients and reduced life expectancy.

There is a growing body of evidence suggesting that reducing or eliminating highly-processed carbohydrates from the diet and substituting more natural foods is beneficial for T2 diabetes in improving some of the key indicators of CVD – including glycaemic control and lipid profile, weight loss and reduction in abdominal obesity.

Previous trials have focused on low GI or low-carbohydrate diets, but without taking into account the nutritional density or quality of the foods or ways of ensuring long-term compliance. There is a gap in the literature on such diets being adapted for different cultural needs to support long term adherence to such a way of eating, should it prove clinically beneficial.

This project aimed to develop culturally-acceptable (traditional and familiar dishes from the Caribbean heritage) low-GI menus that will benefit people with Type 2 diabetes both in terms of nutritional content and palatability, and in glycaemic control, thus improving the chances of long-term compliance with this kind of nutritional approach.

National Institute for Clinical Excellence guidance on T2 diabetes suggests providing individualised and ongoing nutritional advice from a healthcare professional with specific expertise and competencies in nutrition. The advice should be sensitive to the individual's needs, culture and beliefs, their willingness to change and the effects on their quality of life.

A literature review has confirmed the higher prevalence of T2 diabetes in people with South Asian and Black heritage. It has also provided good evidence for the most effective dietary interventions to improve blood sugar control, reduce reliance on medication and improve compliance with healthy eating.

There is good national and local evidence that not only is the target group more vulnerable to T2 diabetes but also less susceptible to mainstream healthy lifestyle messages that are designed to support successful management of the condition

Health professionals have found it hard to reach out to members of minority communities. A supported, well-attended self-help group at the heart of a community presented an ideal opportunity to work over a period of time to explore what would be culturally appropriate and have an impact on the target group's wellbeing.

The **Time to Cook, Time to Talk** project was aimed at members of the Sugar Group, a long-standing support group for older African-Caribbean people with Type 2 diabetes in central Manchester.

2. Research question

What is the impact of an educational intervention about healthy eating for older African-Caribbean people with diabetes?

Impact was assessed by investigating changes in:

- quality of life
- attitudes, subjective norms and confidence about healthy eating
- knowledge and understanding of nutrition in relation to diabetes
- behaviour change with regard to appropriate nutrition for diabetes
- sharing healthy eating recipes with younger adults from the same community

3. Methods

3.1 Phase 1

The main aim of the project was to improve the group's knowledge about, and confidence in, using foods that are useful for glycaemic control. The project provided cook and taste sessions and nutritional education sessions over a period of six weeks (a time commitment of up to 3 hours a week).

Before (Oct 2013) and after (Nov 2013) the sessions and at follow up (Feb 2014), participants were asked to complete 2 questionnaires:

1. WHOQOL Brief – 26 item well validated questionnaire designed to find out about participants' quality of life and health.
2. Theory of planned behaviour questionnaire. 17 items (1-7 response scale, 1 being strongly disagree to 7 being strongly agree) related to attitudes, subjective norms, perceived behavioural control and intentions about healthy eating.

Participants were asked to complete evaluations, take part in a focus group (or give video feedback) about their experiences of the sessions.

In addition, project/group leads were asked to reflect on their experiences of the project (March 2014).

3.2 Phase 2

There were also two joint cook and taste sessions with young people (Oct 2013 and Feb 2014). These provided an opportunity for participants to share what

they have learned with the younger generation in order to encourage them to include more home cooked food in their diet.

Older community members had expressed concern that young Black people have an over reliance on takeaway foods. The shared sessions aim to:

- share knowledge and understanding about healthy diets between the generations to help improve healthy eating
- improve communication and understanding between older and younger generations thus increasing community cohesion.

Participants (younger adults) were asked to take part in a focus group at the end of their cooking session.

4. Analysis

QoL and TPB questionnaires were coded and analysed according to the scoring guidelines for these validated questionnaires. Data was given a unique identifier and then entered into SPSS v20. Missing data was handled by deleting cases listwise. Analysis focused on changes pre to post intervention. Because of low response rates, it is only possible to provide descriptive data.

Focus group audio-recordings and video feedback were transcribed. Project lead questionnaires and evaluation were typed up. An inductive grounded theory approach will be used to develop the coding framework (Strauss & Corbin, 1998). Potential thematic categories were recorded in an analysis document (Microsoft Word) with category (and sub category) headings, and quotes from the data set. By allowing themes to emerge naturally from the data, analysis revealed participant led findings which coincided with the exploratory aims of the present study. Furthermore, this process allowed for a wide range of views to be obtained rather than a more generalisable sample representing the most common views. The qualitative based approach to analysis will be used essentially to obtain a rich and in-depth insight into the research subject.

5. Results

5.1 Response rates

Completion rates for questionnaires was problematic – 9 completed at baseline (from 14 people in the room), 2 at follow up. Feedback suggested low completion was because of the length of the questionnaires and the complexity of the psychological questions asked.

Both focus groups were well attended. 7 in the older generation, 7 in the younger generation. 6 participants completed the evaluation forms at the end of the project (3 older, 3 younger), and 1 made video feedback.

Two project leads completed questionnaires at the end of the project.

5.2 Socio-demographics

Of those who completed the questionnaires:

- 1 was male, 8 were female
- 3 were in their 70s, 2 were in their 50s, 2 were in their 40s and 2 didn't give their date of birth
- 3 were educated to Primary level, 3 to Secondary level, 2 to Tertiary level and 1 didn't answer
- 4 were single, 2 were married, 1 was divorced and 2 were widowed
- 6 said they had a current illness, 3 said they did not
- Illnesses cited were epilepsy, arthritis, stroke, diabetes, depression, hypertension and 'skatriana'.

5.3 Quality of life

Quality of life was measured before and after the intervention. Participants were asked two general questions followed by questions in 4 domains – physical, psychological, social and environmental.

General

General quality of life was self-assessed as by most (n=5) as neither poor nor good. 1 said their QoL was poor, 2 good and 1 very good.

Most participants (n=4) said they were satisfied with their health; 3 were dissatisfied or very dissatisfied; and 1 person was neither dissatisfied nor satisfied.

There was a large age range of participants in the study. In order to be conservative (as QoL declines with age), population norms for people aged 70-79 were used (Hawthorne et al 2006). See figure 1. As can be seen from Figure 1, QoL domains are generally lower than population norms (apart from after the intervention, in the psychological domain). Environmental and social scores were particularly low. Means, standard deviations and ranges for QoL can be found in the Appendix.

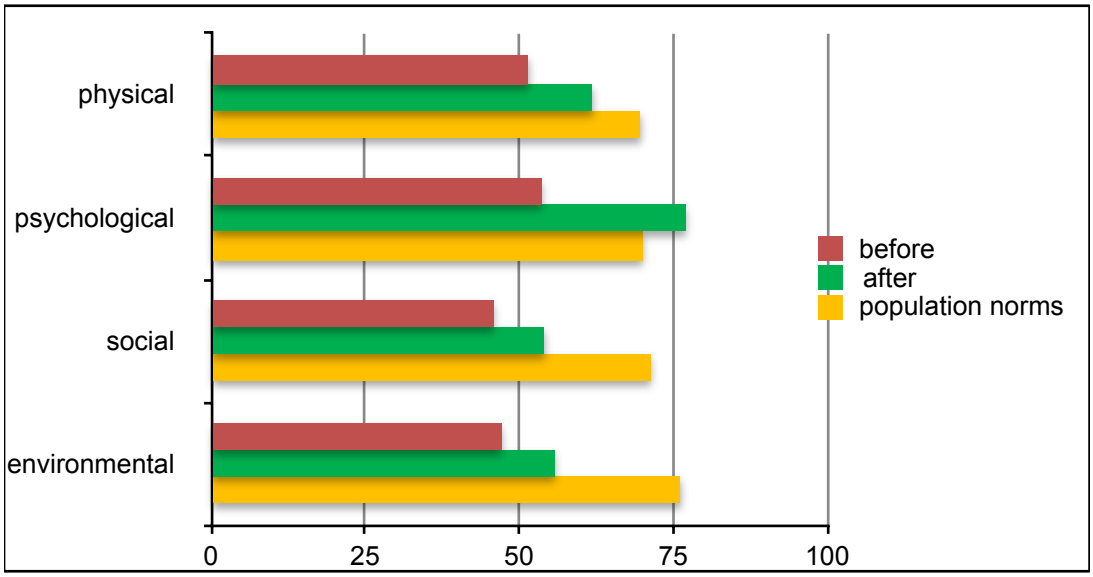


Figure 1: Quality of life in environmental, social, psychological and physical domains – pre and post, and compared to population norms (possible score on each domain 0-100, higher score is greater QoL).

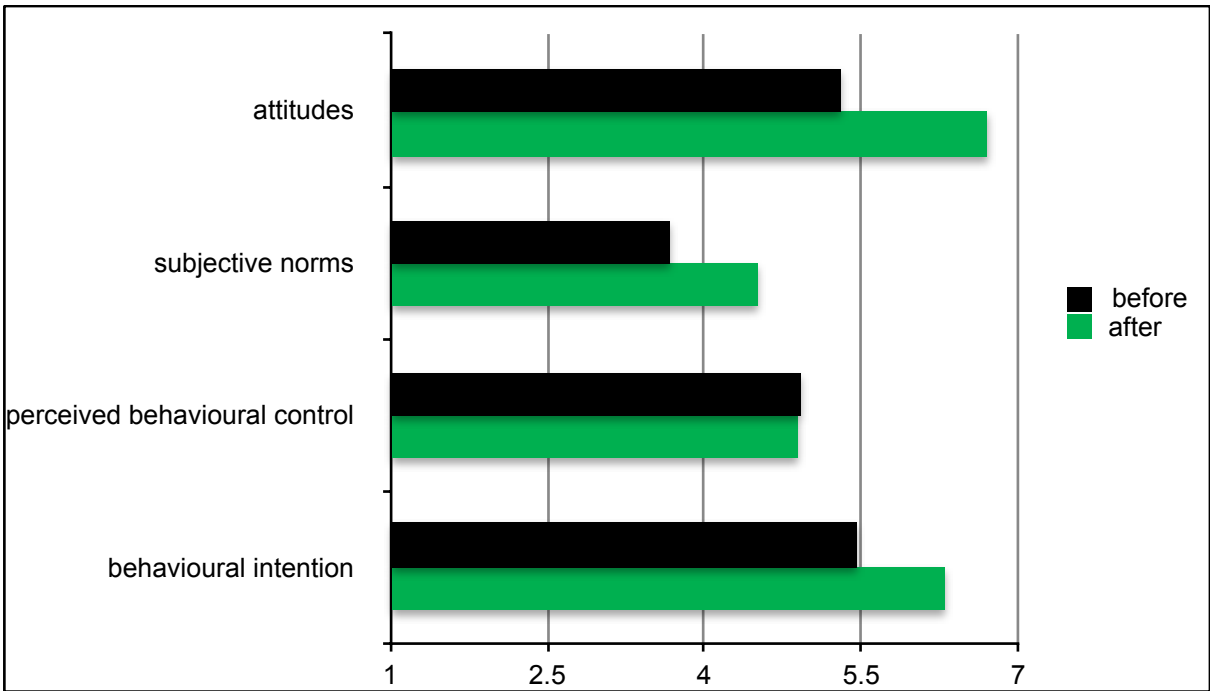


Figure 2: Theory of planned behaviour constructs before and after intervention (possible score on each construct 1-7, higher score is more positive about healthy eating)

Only two participants completed the after QoL questionnaire as well as the before. In one case, QoL had increased in physical and psychological domains (missing data in the other 2 domains). In the other case, QoL had increased in 3 out of 4 domains (decrease in environmental).

Hawthorne G, Herrman H, Murphy B (2006). Interpreting the WHOQOL-Brèf: Preliminary Population Norms and Effect Sizes. Social Indicators Research, 77 (1), 37-5 5.4 Attitudes and beliefs about healthy eating

5.4 Attitudes and beliefs about healthy eating

Attitudes, subjective norms, perceived behavioural control and behavioural intention were measured. As can be seen in figure 1, attitudes towards healthy eating were really positive, and intention to eat healthily high. Subjective norms were lower – indicating that participants were not sure that others around them would support their healthy eating. Perceived behavioural control (confidence) is also lower - participants are not completely confident that they will be able to eat healthily.

5.5 Qualitative data

Thoughts about the project were gathered from a number of different sources:

- focus groups (FF)
- evaluation forms (EF)
- video feedback (VF)
- questionnaires from project leads (LF)

These have been analysed together – but where groups have different perspectives, this is noted. Illustrative quotes are provided (in italics below) and labelled with their source.

Four themes emerged from the data. Where participants have different perspectives, this is noted in the text below. Spelling is participants' own.

5.5.1. Learning holistically

Participants were very positive about the way the taste and cook sessions had been run – the way they had learnt, the facilitation, specific ingredient ideas and the social aspects; and leads also felt it was a positive experience.

Many participants commented on the 'hands on' design of the sessions, feeling that making the recipe and then eating it with the group gave them a much greater understanding of how to cook it, knowing what has gone into it.

Participants talked about the advice they had received over the years from doctors – they felt this was often conflicting, was very general, and didn't relate the food they commonly ate.

They preferred the advice from the project lead, a nutritionist, who explained in detail about what is healthy; and most importantly applied healthy eating principles to their culture.

The group were taking away a lot of useful knowledge about specific ingredients – rediscovering things that were in their store cupboard. They learnt about why things were good to eat as well as how to incorporate them into recipes.

"The people who took part were enthusiastic participants, keen to find out more about nutrition and share information with each other." **[LF2]**

Comments from participants

"Because other than taking the information from a website, which if you've not got a laptop and you don't access a website, you wouldn't really go as far as looking for healthy things. So I think this hands-on is really important." **[FF1]**

"The other thing is we could look it up, but if you try to prepare it and you do it wrong, you could mess up things" **[FF1]**

"Because then you actually learn how to use the ingredients and being able to remember the qualities when it's hands-on" **[FF1]**

They told us we shouldn't eat this, we shouldn't drink that. Someone said we should eat this, we could drink that, so we were confused." **[FF1]**

"The old line was that we couldn't have fats, especially animal fats and things like that. With Loren and the food that we do, it actually has things that the doctor doesn't tell you about, advise you, because we do eat butter now. We've started using butter in food and other things" **[FF1]**

"The knowledge I gained about foods" **[EF2]**

"I think they should be more open to accessibility from people like Loren. If people like Loren approach them, they should make time for them, to listen, because it's not always the old message that's the true message." **[FF1]**

if people are exposed to continuing similar messages and have the chance to follow up with trusted people" [LF1]

"what to cook for diabetes and the nutrition and sugar content of food" **[VF1]**

"It's like we've got ordinary herbs in the cupboards and spices and we didn't know the benefits of those until Loren pointed them out. Things for arthritis like ginger and turmeric, even ordinary pepper and things like that". **[FF1]**

"It became clear to me that there was a lot of confusion and misunderstanding about what constituted the best nutritional approach for T2 diabetes". [LF2]

LOTTERY FUNDED

published
July 2014